

**Hospital-STEMI Work Group**  
**DRAFT-Composite Template for Criteria for STEMI Center Designations**  
**For Discussion December 2, 2008**

CRITERIA	LEVEL I	LEVEL II	LEVEL III	LEVEL IV
<b>Group A/B</b>				
<b>I. Volume:</b>				
1. 200+ Elective PCI/year	x	☐		
2. 75+ PCI procedures for STEMI/year	x	☐		
<b>II. Hospital Capabilities:</b>				
1. Cardiac rehab available onsite/within network (see IX)	x	x	✖	
2. Designated ICU for STEMI patients	x	x	✖	
3. 24x7 Laboratory to provide necessary testing and results	x	x	☐	
4. One call access to cath lab team via ED (See VIII)	x	x	☐	
5. Formal alliance with Level I/Level II STEMI Center to transfer complex patients	☐	x	x	
6. Protocols for triage, transfer, and/or treatment of STEMI patients in ED (See VIII)		x	x	
7. STEMI Medical Director	x	☐	☐	
8. STEMI Program Manager	x	☐	☐	
9. 24x7 Surgical Backup	x			
10. Angiography and interventional capabilities available on 24x7 basis	x	☐		
11. Time Frame for availability of services (Group C/D/E.)				
i. 24/7 Emergency Department with physician in-house	x	x	x	
ii. 24/7 CATH Lab and Coronary Artery Bypass Graft (CABG)	x			
iii. Intermittent cath lab		x		
<b>III. Performance Metrics:</b>				
1. PCI within 90 minutes of arrival (x% of time)	x	x		
2. Lytics within 30 minutes of arrival (x% of time)		x	x	
3. Formal STEMI/AMI CQI process	x	x	x	
<b>IV. Personnel Education/Credentials: (See Group I)</b>				
1. RN credentialing for STEMI care	x	x	x	
2. Medical Director CEU hours	x	x	x	
3. Emergency Department RN CEUs	x	x	x	
4. Minimum CEU requirements for ED and Cath Lab staff	x	x	x	

*For consistency with current trauma center criteria, proposed alterations: ☐-require for this level ✖-delete for this level*

DRAFT-Composite Template for Criteria for STEMI Center Designations  
For Discussion December 2, 2008

CRITERIA		LEVEL I	LEVEL II	LEVEL III	LEVEL IV
<b>V. Community Education:</b>					
1.	Public education program for STEMI signs/symptoms, emergency transport, STEMI treatment	x	x	x	
2.	Ability to collect and report data to STEMI registry/STEMI reporting to DHSS	x	x	☐	
3.	Cardiology outreach program for 24 hour phone consults	x			
<b>VI. Research: (See Group F/G/H-XI)</b>					
	Active research program focusing on STEMI	x			
<b>Group C/D/E</b>					
<b>VII. Diversion Avoidance Policy</b>					
1.	Process in place for acceptance of all STEMI Patients	x			
2.	Diversion process in place for acceptance of all STEMI patients unless cath lab not available		x		
3.	Process in place for acceptance of all STEMI patients as determined by physician and EMS communication for reperfusion strategy.			x	
<b>VIII. Hospital protocol for pre-hospital and STEMI Team Communication</b>					
1.	EKG, hear system 24/7 and access to EM system	x	x	x	
2.	Mechanism in place for activation of Cardiac Cath lab team at time of EMS STEMI identification	x	x	x	
<b>IX. Hospital protocol for care and coordination</b>					
1.	Staff credentialed in STEMI (see credential section XIV.)	x	x		
2.	Cardiac rehabilitation in-house	x	x		
3.	Written network agreement for the provision of cardiac rehabilitation post discharge	☐	☐	x	
<b>X. Hospital protocol for rapid transfer from non-PCI facility (when appropriate)</b>					
1.	Accept all STEMI transfers	x			
2.	Accepts all transfer when cath lab available. When cath lab not available, rapid transfer process in place to higher level.		x	x	
3.	A rapid transfer process in place with higher level of STEMI care			x	☐

- 2 For consistency with current trauma center criteria, proposed alterations:  
☐-require for this level  
x-delete for this level

DRAFT-Composite Template for Criteria for STEMI Center Designations  
For Discussion December 2, 2008

CRITERIA		LEVEL I	LEVEL II	LEVEL III	LEVEL IV
<b>Group F/G/H</b>					
<b>XI. Institutional involvement in clinical research related to heart disease or STEMI</b>					
1. Patient oriented research required:					
i. Mechanism of human disease		X			
ii. Therapeutic interventions		X			
iii. Clinical trials		X			
iv. Development of new technologies		X			
2. Epidemiologic and behavioral studies		X			
3. Outcomes research and health services research		X			
4. An established Institutional Review Board (IRB) is required		X			
5. Access to an IRB			X		
6. The hospital and its staff shall support a research program in STEMI as evidenced by:					
• Publications in a peer review journal		X			
• Reports of findings presented at regional and/or national conferences		X			
• Receipt of grants for study of STEMI care		X			
• Production of evidenced based reviews		X			
7. Cooperate and participate with the DHSS in conducting epidemiological studies and individual case studies for the purpose of developing STEMI prevention programs		X	X	X	
<b>XII. Hospital capacity to support STEMI patient care and discharge transition back to care and oversight by their primary care physician.</b>					
1. Reperfusion therapy availability (number of procedures, 24/7 availability, rural vs. urban)					
2. Availability of hospital departments/services to support STEMI care					
ED					
Cath Lab					
ICU					
Inpatient areas					
General standards for staffing and competencies					
Competencies for each of these areas					
3. Clinical competency of staff					
4. Transfer capability for sending and receiving facilities					

DRAFT-Composite Template for Criteria for STEMI Center Designations  
For Discussion December 2, 2008

5. Discharge transition back to care and oversight by PCP <ul style="list-style-type: none"> <li>• Secondary prevention</li> <li>• Discharge planning</li> </ul>
6. Timely feedback for sending and receiving facilities Call within 24 hours followed with written notice within 72 hours
7. Quarterly regional STEMI conferences
8. Public education and awareness activities
<b>XIII. Ability to report data and maintain quality improvement process</b>
1. Immediate feedback to the transfer hospital and EMS
2. Competencies for the practitioner, nurse and physician
3. ACC guidelines/registry
4. ACC/PCI guidelines
5. Reimbursement issues <ul style="list-style-type: none"> <li>• Should it be tied to a registry?</li> <li>• Severity of illness?</li> </ul>
6. Quality vs. what for EMS to decide which place to go
7. Risk adjusted mortality

Composite Template for Criteria for STEMI Center Designations  
For Discussion December 2, 2008

XI V. Personnel Credentials and Abilities (Group I.)					
Department /Position	Credentials and Abilities	LEVEL I	LEVEL II	LEVEL III	LEVEL IV
<b>A) Emergency Department</b>					
<b>Physicians</b>	<b>1) Medical Director</b>				
	a) BCEM Recommended				
	b) BCEM required by 2020				
	c) 5 hours CME every 3 years or participation in one hospital-sponsored grand rounds every 2 years on management of ACS/STEMI*				
	d) ACLS				
	e) Demonstrate ECG interpretation competency under the purview of the hospital PI committee				
	f) Must be a member of the STEMI/ACS oversight committee				
	<b>2) Emergency Physician</b>				
	a) BCEM Recommended				
	b) New hire physicians: BCEM required by 2020				
	c) 5 hours CME every 3 years or participation in one hospital-sponsored grand rounds every two years on the management of ACS and STEMI*				
	d) ACLS				
	e) Demonstrate ECG interpretation competency under the purview of the hospital PI committee				
	<b>3) Other Physicians</b>				
	a) ACLS				
	b) 5 hours CME every 3 years or participation in one hospital-sponsored grand rounds every two years on the management of ACS and STEMI*				
	<b>4) Nursing Staff</b>				
<b>Nurses</b>	a) ACLS		R		
	b) 60% of staff CEN by 2020		R		
	c) Annual ACS course demonstrating ACS/STEMI competency to include the minimum:				
	d) Obtaining a 12-lead ECG				
	e) Obtaining a right-sided ECG				
	f) ECG ST-segment and T-wave interpretation				
	g) Signs and symptoms of ACS in patients				
	h) Signs and symptoms of ACS in patient with co-morbidities				
	i) Gender differences in the symptoms of ACS				
	j) Age-related differences in the symptoms of ACS				
	k) Identifying major dysrhythmias				

Composite Template for Criteria for STEMI Center Designations  
For Discussion December 2, 2008

Department /Position	Credentials and Abilities	LEVEL I	LEVEL II	LEVEL III	LEVEL IV
<b>5) Allied Health Professionals</b>					
	Annual competencies including				
	a) Obtaining a 12-lead ECG				
	b) Obtaining in right-sided ECG				
<b>B) Cardiology</b>					
<b>Physicians</b>	<b>1) Medical Director-Cath Lab</b>		<b>R</b>		
	a) BCIM				
	b) BCCV		R		
	c) BCIC required by 2020		D		
	d) 5 hours CME every 3 years or participation in one hospital-sponsored grand rounds every two years on the management of ACS and STEMI*				
	e) ACLS				
	f) Must be member-STEMI/ACS oversight committee				
	<b>2) Interventional Cardiologist</b>				
	a) BCIM		R		
	b) BCCV		R		
	c) Recommended BCIC		R		
	d) BCIC		D		
	e) 5 hours CME every 3 years or participation in one hospital-sponsored grand rounds every two years on the management of ACS and STEMI*				
	f) ACLS				
<b>Nurses</b>	<b>2) Nursing Staff</b>				
	a) ACLS				
	b) Technological Competencies including:				
	(1) IABP				
	(2) LVAD				
	(3) Temporary Pacer				
	c) Annual ACS course demonstrating ACS/STEMI competency to include the minimum:				
	(1) Obtaining a 12-lead ECG				
	(2) Obtaining a right-sided ECG				
	(3) ECG ST-segment and T-wave interpretation				
	(4) Signs and symptoms of ACS in patients				
	(5) Signs and symptoms of ACS in patient with co-morbidities				
	(6) Gender differences in the symptoms of ACS				
	(7) Age-related differences in the symptoms of ACS				
	(8) Identifying major dysrhythmias				

Composite Template for Criteria for STEMI Center Designations  
For Discussion December 2, 2008

Department /Position	Credentials and Abilities	LEVEL I	LEVEL II	LEVEL III	LEVEL IV
	<b>d) Demonstrated competency of medical education and complication management</b>				
<b>Others</b>	<b>3) Cath Lab Technicians</b>				
	a) ACLS				
	b) Recommended RCVT, RCIS				
	c) RCVT, RCIS by 2020				
	<b>C) Post-STEMI Cardiac After-care</b>				
<b>Physicians</b>	<b>1) Medical Director</b>				
	a) BCIM				
	b) BCCV				
	c) 5 hours CME every 3 years or participation in one hospital-sponsored grand rounds every two years on the management of ACS and STEMI*				
	d) ACLS				
	e) Must be a member of the STEMI/ACS oversight committee				
	<b>2) Physicians</b>				
	a) BCIM				
	b) BCCV				
	c) 5 hours CME every 3 years or participation in one hospital-sponsored grand rounds every two years on the management of ACS and STEMI*				
	d) ACLS				
<b>Nurses</b>	<b>3) Nursing Staff</b>				
	a) ACLS				
	b) Technological Competencies including: i) IABP ii) LVAD iii) Temporary Pacer				
	c) Annual ACS course demonstrating ACS/STEMI competency to include the minimum: i. Obtaining a 12-lead ECG ii. Obtaining a right-sided ECG iii. ECG ST-segment and T-wave interpretation iv. Signs & symptoms of ACS in patients v. Signs and symptoms of ACS in patient with co-morbidities vi. Gender differences-symptoms of ACS vii. Age-related differences in the symptoms of ACS viii. Identifying major dysrhythmias				
	d) Demonstrated competency of medical education and complication management				
	e) CCRN: 60% recommended by 2012				